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| APPLICATION NO. | FIL | ING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-----------|--------------|----------------------|---------------------|------------------|
| 10/632,665 | 08 | 3/01/2003 | Ziv Haparnas | IXIM-01016US0 | 3547 |
| 28554 | 7590 | 07/18/2006 | | EXAM | IINER |
| VIERRA M | IAGEN M | ARCUS & DEN | IRO LLP | CHEN, S | HIN HON |
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| SAN FRANC | CISCO, CA | A 94105 | ART UNIT | PAPER NUMBER | |

DATE MAILED: 07/18/2006

213I

Please find below and/or attached an Office communication concerning this application or proceeding.

| r | | Application No. | A-plica-Ma | | | |
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| 4 | | Application No. | Applicant(s) | | | |
| | Office Action Summer: | 10/632,665 | HAPARNAS ET AL. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | Shin-Hon Chen | 2131 | | | |
| Period for | - The MAILING DATE of this communication apper r Reply | ears on the cover sheet with the c | orrespondence address | | | |
| WHICI - Extens after S - If NO p - Failure Any re | PRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 EX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we be to reply within the set or extended period for reply will, by statute, ply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b). | TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | N. nely filed the mailing date of this communication. D (35 U.S.C.§ 133). | | | |
| Status | | | | | | |
| 1) 1 | Responsive to communication(s) filed on 20 Ap | oril 2005. | | | | |
| · | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) 🗌 💲 | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| (| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 33 O.G. 213. | | | |
| Dispositio | on of Claims | | | | | |
| 5)□ (6)⊠ (7)□ (| Claim(s) <u>1-53</u> is/are pending in the application. (a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-53</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | | | | | |
| Application | on Papers | | | | | |
| 9)□ T | he specification is objected to by the Examiner | | | | | |
| 10)⊠ T | he drawing(s) filed on <u>01 August 2003</u> is/are: | a)⊠ accepted or b)□ objected t | o by the Examiner. | | | |
| , | Applicant may not request that any objection to the d | rawing(s) be held in abeyance. See | : 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| | nder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(: | s) | | | | | |
| 1) Notice | of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | |
| 2) ☐ Notice 3) ⊠ Informa | of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 6/7/04, 6/10/04. | Paper No(s)/Mail Da | | | | |

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DETAILED ACTION

1. Claims 1-53 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sugikawa et al. U.S. Pub. No. 20040203384 (hereinafter Sugikawa).

As per claim 1, Sugikawa discloses a method for authenticating, comprising the steps of: storing a first short-range radio address for a cellular device in a processing device (Sugikawa: [0105]-[0108]); obtaining an authentication message in the processing device (Sugikawa: [0108]-[0109]: generating the random number); storing a second short-range radio address in the cellular device (Sugikawa: [0108]-[0109]: the portable device with bluetooth address), wherein the first short-range radio address and the second short-range radio address are the same (Sugikawa: [0109]: the Bluetooth addresses are the same); calculating a first message digest responsive to the authentication message and first short-range radio address (Sugikawa: [0109] and [0211]: MD5); transmitting, by a cellular network coupled to the processing device, a cellular message including the authentication message and the first message digest to the cellular device

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(Sugikawa: [0109]-[0110]: mutual authentication); receiving the cellular message, by the cellular device; calculating a second message digest responsive to the authentication message and the second short-range radio address; and, comparing, by the cellular device, the first message digest to a second message digest to authenticate the cellular message (Sugikawa: [0109]: compare the SRES).

- 4. As per claim 2, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the authentication message is randomly calculated (Sugikawa: [0107]-[0108]: the random number is generated).
- 5. As per claim 3, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the first message digest is a 128-bit value calculated by a one-way hash software component (Sugikawa: [0108] and [0211: the message digest is computed using the bluetooth address of the device).
- 6. As per claim 4, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the one-way hash software component is a MD5 software component (Sugikawa: [0211]: MD5 is standard for OBEX).
- As per claim 5, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the first and second short-range radio addresses are a Bluetooth address (Sugikawa: [0108]).

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- 8. As per claim 6, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the cellular device includes a short-range radio transceiver (Sugikawa: [0108]-[0110]: short range radio communication).
- 9. As per claim 7, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the cellular device is in a short-distance wireless network (Sugikawa: [0108]).
- 10. As per claim 8, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the short-distance wireless network is a Bluetooth wireless network (Sugikawa: [0004]-[0008]).
- 11. As per claim 9, Sugikawa discloses the method of claim 7. Sugikawa does not explicitly disclose wherein the short-distance wireless network is an 802.11 wireless local area network (Sugikawa: [0003]-[0008]). However, one with ordinary skill in the art would understand that same authentication method can be applied in 802.11 wireless LAN because both are well known protocol for short range wireless network.
- 12. As per claim 10, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the first and second short-range radio addresses are 48-bit values (Sugikawa: [0108]: the bluetooth address has 48 bits).

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13. As per claim 11, Sugikawa discloses the method of claim 1. Sugikawa further discloses wherein the cellular device is a cellular telephone (Sugikawa: [0005]: portable terminals can be cell phone).

- 14. As per claim 12, Sugikawa discloses the method of claim 1, wherein the processing device is a server (Sugikawa: [0108]).
- As per claim 13, Sugikawa discloses method for authenticating comprising the steps of: storing a first short-range radio address, for a cellular device, in a processing device (Sugikawa: [0105]-[0108]); obtaining an authentication message in the processing device (Sugikawa: [0108]-[0109]): generating the random number); storing a second short-range radio address in the cellular device, wherein the first short-range radio address and the second short-range radio address are the same (Sugikawa: [0108]-[0109]): the portable device with bluetooth address); calculating, by the processing device, a first message digest responsive to the authentication message and first short-range radio address; transmitting, by a cellular network coupled to the processing device, a cellular message including the authentication message to the cellular device (Sugikawa: [0109] and [0211]: MD5); receiving the cellular message, by the cellular device; calculating a second message digest responsive to the authentication message and the second short-range radio address; transmitting, by the cellular device, the second message digest; and, comparing, by the processing device, the first message digest to a second message digest to authenticate the cellular message (Sugikawa: [0108]-[0109]).

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16. As per claim 14, Sugikawa discloses a method comprising; storing a first short-range radio in a cellular device; storing a second short-range radio addresses in a processing device, wherein the first short-range radio address and the second short-range radio address are the same (Sugikawa: [0107]-[0109]); encrypting a cellular message, by the processing device, using the second short-range radio address (Sugikawa: [0105] and [0107]: the LMP_au_rand is transmitted from the master to slave encrypted with unit key as well known in the art and the unit key is generated from bluetooth address); transmitting the encrypted cellular message to the cellular device; and decrypting the encrypted cellular message, by the cellular device, using the first short-range radio address (Sugikawa: [0108]: the slave device receives the LMP_au_rand and decrypts it use the unit key).

- radio in a cellular device; storing a second short-range radio addresses in a processing device, wherein the first short-range radio address and the second short-range radio address are the same (Sugikawa: [0107]-[0109]); encrypting a cellular message, by the cellular device, using the first short-range radio address; transmitting the encrypted cellular message to the processing device; and decrypting the encrypted cellular message, by the processing device, using the second short-range radio address (Sugikawa: [0107]-[0109]: the role of slave and master can be interchanged).
- 18. Claims 16-27 and 29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Morimoto U.S. Pub. No. 20040203372 hereinafter (Morimoto).

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19. As per claim 16, Morimoto discloses a method for identifying a cellular device, comprising the steps of: receiving, by the cellular device, a first cellular message requesting a cellular device identifier; reading, by the cellular device, a first short-range radio address from the device; transmitting, by the cellular device, a second cellular message including the first short-range radio address (Morimoto: [0040]-[0041]); storing a second short-range radio address in a processing device; and, comparing the first short-range radio address to the second short-range radio address to identify the cellular device (Morimoto: [0041]).

- 20. As per claim 17, Morimoto discloses the method of claim 16. Hue further discloses wherein the first and second short-range radio addresses are Bluetooth addresses (Morimoto: [0041]).
- 21. As per claim 18, Morimoto discloses the method of claim 16. Hue further discloses wherein the cellular device includes a short-range radio transceiver (Morimoto: [0041]).
- 22. As per claim 19, Morimoto discloses the method of claim 16. Hue further discloses wherein the cellular device is in a short-distance wireless network (Morimoto: [0041]).
- 23. As per claim 20, Morimoto discloses the method of claim 19. Hue further discloses wherein the short-distance wireless network is a Bluetooth wireless network (Morimoto: [0041]).

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As per claim 21, Morimoto discloses the method of claim 16. Hue does not explicitly disclose wherein the short-distance wireless network is an 802.11 wireless local area network (Morimoto: [0041]). However, one with ordinary skill in the art would understand that 802.11 can also be used because Bluetooth and 802.11 are well known standards in wireless short range network.

- 25. As per claim 22, Morimoto discloses the method of claim 16. Morimoto further discloses wherein the reading step includes executing a host controller command (Morimoto: [0040]: standard procedure for reading BD_ADDR).
- As per claim 23, Morimoto discloses the method of claim 22. Morimoto further discloses wherein the host controller command is HCI_Read_BD_ADDR and the short-range radio address is BD_ADDR (Morimoto: [0040]).
- As per claim 24, Morimoto discloses the method of claim 16. Morimoto further discloses wherein the first and second short-range radio addresses are 48-bit values (Morimoto: [0040]-[0041]: Bluetooth address comprises 48 bits).
- 28. As per claim 25, Morimoto discloses the method of claim 16. Morimoto further discloses wherein the cellular device is a cellular telephone (Morimoto: [0040]: portable phone).

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29. As per claim 26, Morimoto discloses the method of claim 16. Morimoto further discloses receiving a third cellular message responsive to the second cellular message (Morimoto: [0051]: confirming authentication).

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- 30. As per claim 27, Morimoto discloses the method of claim 26. Morimoto further discloses wherein the first, second and third cellular messages are generated by a cellular network coupled to a processing device storing the second short-range radio address corresponding to the cellular device (Morimoto: [0040]-[0041]: the cellular network).
- 31. As per claim 29, Morimoto discloses a method for identifying a cellular device comprising the steps of: receiving, by the cellular device, a first cellular message having a first short-range radio address (Morimoto: [0040]-[0041]); reading a second short-range radio address from the cellular device; comparing, by the cellular device, the first short-range radio address with the second short-range radio address; and, transmitting a second cellular message responsive to the comparing step (Morimoto: [0040]-[0041]).

Claim Rejections - 35 USC § 103

- 32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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33. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto in view of Chen U.S. Pub. No. 20040203950 (hereinafter Chen)

- 34. As per claim 28, Morimoto discloses the method of claim 16. Morimoto does not explicitly disclose wherein the first, second and third cellular messages are in a Global System for Mobile communications ("GSM") protocol. However, Chen discloses transmitting SMS message command to obtain Bluetooth address of controlled devices (Chen: [0017]). It would have been obvious to one having ordinary skill in the art to transmit the cellular message in GSM network because the processing device is capable of transmitting the message in GSM network. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Chen within the system of Morimoto because it provides remote control on Bluetooth capable devices.
- 35. As per claim 30-53, claims 30-53 encompass the same scope as claims 1-29. Therefore, claim 30-53 are rejected based on reasons set forth above in rejecting claims 1-29.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Calmels et al. U.S. Pub. No. 20050130627 discloses authentication between a cellular phone and an access point of a short-range network.

Hagiwara U.S. Pub. No. 20060148402 discloses connection authentication in wireless communication network system.

Hue et al. U.S. Pub. No. 20020126846 discloses method for performing short-range wireless transactions between an hybrid wireless terminal and a service terminal over an interface for short-range wireless access and corresponding service terminal.

Yue U.S. Pub. No. 20040203354 discloses Bluetooth remote access device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shin-Hon Chen

5 ma/2006